

most of their life, as this may well be significantly correlated with the brilliance of the shell itself. Unfortunately the light received and that reflected have not been measured in light units, but the present method of comparing the brilliance with a standard may have some reconnaissance value.

It can be applied to other gastropods. Thus at Sandy Bay *Nerita tristis* gave values of 21% which compares with the average of *Neritina virginea* there of 28%, and these two crawling together have some resemblances in patterns that may lead to mistaking one for the other.

A NEW SPECIES OF STENOTREMA FROM EAST TENNESSEE

BY ALLAN F. ARCHER

STENOTREMA WALDENSE, new species. Text figure 1.

Description.—Shell small, imperforate, rather solid, subglobose, dull. Color varying from very light chestnut-brown on body-whorl to dull ivory on earlier whorls. Cuticle horny brown. Peristome and parietal lamella very pale ivory. Whorls 5, rather gently increasing, moderately convex, nuclear whorl somewhat convex. Suture gently impressed. Body whorl slightly bulging behind peristome, and having a faintly angular periphery. Base of body-whorl rather convex. Aperture narrow and transverse. Outer peristome flaring outwards, rather narrow, becoming in-



FIG. 1.

creasingly narrow where it joins the body wall. Basal peristome rather narrow. Anal sinus gently rounded. Subanal denticle weakly angular. Interdenticular sinus quite broadly curved and having a flat surface. Outer and basal denticle on either side of the notch undifferentiated from inner rim of peristome. Notch v-shaped, very reduced and narrow. Parietal lamella simple, very gently arched and not prominent; proportionately short, its distal end not descending deeply into the aperture in the vicinity of the

interdenticular notch. Parietal callus rather narrow, curving upwards where it meets termination of outer peristome. Eroded nuclear whorl showing faint traces of axial striation. Succeeding whorls possessing fine axial riblets, a little irregularly spaced and occasionally interrupted. Beginning at about the fourth whorl and continuing to the edge of the peristome the surface is covered with fine, rather closely crowded spiral lines. Height 6 mm., greater diameter 8 mm., lesser diameter 7.8 mm.

Holotype.—A. N. S. P. No. 168938, from Doaks Creek, Campbell County, Tennessee. Paratypes in the collection of the Museum of Zoology, Ann Arbor, Michigan. A. R. Cahn collector, 1937.

Remarks.—The specimens collected are all dead adults, and it would be desirable to obtain live material in order to get a better idea of the color of the shell and other useful data. This species is evidently distinct from any other *Stenotrema*. It is quite probable that its nearest relative is *Stenotrema edvardi* (Bland); its sculpture indicates that live specimens would probably have thorn-like cuticular hairs similar to those of *edwardsi*. It differs from the latter in the following ways.

S. waldense

1. Parietal lamella proportionately short, its distal end not deeply descending into the aperture.
2. Peristome rounded and blunt
3. Shell subglobose.

S. edwardsi

1. Parietal lamella proportionately long, deeply descending into the aperture.
2. Peristome strongly angular.
3. Shell lenticular.

The whorls are also more rapidly increasing than in *edwardsi*. *Stenotrema waldense* may be distinguished at once from *S. hirsutum* by the fact that the distal end of the parietal lamella does not descend deeply into the aperture as in the case of the latter. In this respect it also differs from *S. stenotrema*, and also by the narrow basal peristome. *S. waldense* can, moreover, be distinguished from *S. altispira* by possessing a fine, narrow notch, a shallow basal peristome and a convex base, while in the latter the notch is wide and gaping, the basal peristome is broad, and the base of the shell is quite flattened.

This snail is named for the Walden's Ridge area in which it occurs.

